ACC.11
60th Annual Scientific Session & Expo

E1533
JACC April 5, 2011
Volume 57, Issue 15

VASCULAR DISEASE

SAFETY AND EFFICACY OF ENOXAPARIN AND FONDAPARINUX AS ADJUNCTIVE TREATMENT TO THROMBOLYSIS IN PATIENTS WITH HIGH AND INTERMEDIATE RISK PULMONARY EMBOLISM: AN ADJUSTED PROPENSITY SCORE ANALYSIS

ACC Poster Contributions
Ernest N. Morial Convention Center, Hall F
Monday, April 04, 2011, 9:30 a.m.-10:45 a.m.

Session Title: Venous Thrombosis/Pulmonary Embolism/Pulmonary Hypertension
Abstract Category: 12. Venous Thrombosis/Pulmonary Embolism/Pulmonary Hypertension
Session-Poster Board Number: 1078-124

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Aim Low-molecular-weight heparins (LMWH) or fondaparinux (fonda) appear to be as effective and safe as intravenous unfractionated heparin (UFH) in pts with acute pulmonary embolism (PE). UFH is the only anticoagulant treatment recommended in association with thrombolytic agents in this setting. No data are available on the efficacy and safety of enoxaparin (enox) or fonda as adjunctive therapy to thrombolysis in patients with PE.

Methods Prospective, single-center registry of confirmed intermediate to high risk PE pts. We used a combined in-hospital endpoint defined as death, recurrent PE, or major bleeding. To adjust for potential bias, we used a propensity score by logistic regression, corresponding to the predicted probability that patients were treated by UFH, vs enox or fonda. Secondary endpoints were residual pulmonary vascular obstruction (RPVO) as assessed by perfusion lung scan at discharge and 6 months.

Results Among 951 pts submitted to thrombolysis from 1995-2010, 637 received UFH, 220 enox, and 64 fonda. Baseline characteristics were similar. Results are reported in the table. After adjusting on propensity score, there was no significant difference in terms of death, recurrent PE, major bleeding or combined endpoint, or in RPVO at discharge and 6 months follow-up.

Conclusion Our data suggest that enox and fonda procure adequate efficacy and tolerability vs standard current therapy in combination with thrombolysis in high to intermediate risk PE.

	UFH (N=637)	Enox (n=220)	Fonda (N=64)	P Non adjusted	OR (95%CI) UFH vs Enox adjusted	OR (95%CI) UFH vs Fonda adjusted
In-hospital death	54 (8.5%)	19 (8.6%)	1 (1.6%)	0.14	0.22 (0.03-1.67)	0.17 (0.02-1.49
Recurrent PE	35 (5.5%)	6 (2.7%)	2 (3.1%)	0.20	1.49 (0.28-7.87)	0.71 (0.16-3.2_
Major bleeding	64 (10.1%)	29 (13.2%)	6 (9.4%)	0.40	0.69 (0.22-2.24)	0.52 (0.16-3.2)
Combined endpoint	110 (17%)	36 (16.4%)	7 (10.9%)	0.43	0.85 (0.37-1.97)	0.80 (0.36-1.79)